A.S.D. Report

Organisation and Staffing

A number of changes have occured in the apiary section this year, beginning with the retirement of Mr Bill Rodie from Palmerston North. Bill has been in the MAF for over 35 years.

Two new officers, Mark Schrader (Oamaru) and Clive Vardy (Gore), completed their training and took up permanent positions. Cliff van Eaton was transferred from Gore to Whangarei and Ted Roberts took up Palmerston North on August 26 when his employment as senior lecturer at Massey University expired.

Mr Brian Milnes, formerly apiary instructor, MAF, Auckland, has become a field officer. The contributions of both Milnes and Rodie to the beekeeping industry are acknowledged.

A significant number of field officers, livestock officers, and beekeepers were employed as part-time inspectors. Their assistance is appreciated.

Figure 1: Beekeeper, apiary, and hive statistics: Tauranga district

Year	Beekeepers	Apiaries	Hives	
1979	353	1,733	18,812	
1980	388	1,668	22,006	
1981	533	1,920	25,982	
1982	577	2,238	30,316	
1983	717	2,680	37,026	
1984	772	2,939	43,313	
1985	801	3,332	48,143	

Figure 2: Beekeeper, apiary and hive statistics for NZ: May 1985

District	Beekeepers	Apiaries	Hives	
North Auckland	657	1,878	18,265	
Auckland	1,467	2,715	18,594	
Hamilton	739	3,013	45,466	
Tauranga	801	3,332	48,143	
Palmerston North	1,395	3,793	36,274	
Nelson	582	2,133	22,775	
Christchurch	780	3,528	45,169	
Oamaru	353	3,455	46,006	
Gore	351	2,171	28,736	
Total	7,125	26,018	309,428	

Figure 3: Honey production in tonnes by apiary district as at May 31.

Beekeeping Statistics

(a) Beekeeper, Apiaries, and Hives

There were 7,125 beekeepers owning 309,428 colonies of bees, representing an increase of 32,423 colonies or nearly 12%. Some of this increase represents a continued expansion of beekeeping and some is due to improved data processing now that apiary records are on computers.

The region with the most dramatic increase in colony numbers over the past few years is Tauranga.

b) Honey Crop

The crop was assessed at 10,314 tonnes compared with last year's 5,818 tonnes. This is the first time the estimated crop has gone over 10,000 tonnes but it is not the largest crop on a per hive basis. This season's production represented 33 kg/hive while in 1975 the crop was 36 kg/hive, 39 kg/hive in 1978, and 32 kg/hive in 1980.

c) American Brood Disease

It has not been possible to get an accurate figure of disease levels this year. However, two large outbreaks of disease in commercial outfits were cause for concern. One of these involved the destruction of over 1,227 hives

Bee Diseases: General

a) Apiary Register

Keeping the apiary register up-to-date is onerous, time consuming, and expensive. It is quite common for apiary registrars to have 14-20% of the returns still outstanding by March, four months after they were due despite two or three reminders. The Ministry is looking closely at the whole question of maintaining an apiary register and the possibility of recovering some of the costs involved in disease inspection. Current costings from two regions suggest that these are around 50¢ a hive on all hives in the districts.

b) Importation of Beltsville Bee Diet

Three separate importations of pollen substitute patties were made from Bio Serv in the USA but only one of these shipments was found to contain bee-collected pollen. This particular shipment also contained chalk-brood spores. Before the diseased pollen patties were released from quarantine, advice was sort from the importer, from DSIR, and from the manufacturer as to whether the patties contained pollen or not. The Beltsville bee diet formula, which these patties claimed to be made to, did not contain pollen.

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* The Christchurch crop includes honey dew

	Auckland/ Northland	Hamilton	Tauranga	Palmerston	Nelson	* ChCh	Oamaru	Gore	Total	kg/ hive
1984	300	731	682	495	800	1,150	1,100	560	5,818	21
1985	1,502	1,697	1,550	1,088	685	1,650	1,352	790	10,314	33

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In the light of this experience MAF and Customs procedures have been tightened and any future importations of bee fodder will be held for laboratory examination before release.

c) Agricultural Quarantine Service (AQS) Interceptions

AQOs are currently intercepting some 200 samples of honey and bee products per month at four main airports. The AQS is under pressure to clear passengers as quickly as possible, but it still has to rely on passenger honesty to declare illegal foodstuffs.

d) Sale of Diseased Hives

A number of beekeepers (including commercial beekeepers) continue to sell hives of bees without a permit or even consulting MAF before or after a sale. Some of these transactions have involved hives infected with Bacillus larvae.

e) Sacbrood and Paralysis

Dr Shimanuki made the observation that New Zealand bee stocks had a rather high level of these virus diseases. These viruses could be causing more lost production than we are aware of and beekeepers and queen producers were advised to select breeder queens that appeared to be free of these diseases.

Advisory Activities

a) Industry Plan

ASD has a continuing commitment to assist agricultural organisations to become more effective. Apiary staff have worked closely with the Executive and members of the various pollination and queen breeders' associations.

A course on strategic planning was held for commercial beekeepers at the Bay of Plenty Community College. The success of this course may encourage other AAOs to hold similar courses in their regions.

The beekeeping industry leads other agricultural organisations in the application of management by objectives and we are being used as a model by other groups.

b) Export of Queen Bees and Package Bees

The first shipments of package bees were made to Canada, along with a significant number of queen bees. Quality assurance documents and transhipment details for the package bees were completed in time so the exports were not held up.

A trial shipment of 50 queen bees was sent to the USDA at Beltsville, USA, for stock evaluation and testing for pests and diseases. The presence of <u>Mellitiphis mites</u> on some of our package bees to Canada is cause for concern and may mean the United States will not accept our queen bees or our packages.

The major limiting factor in expanding package bee exports to Canada will be lack of suitable transport. New Zealand beekeepers will need to co-ordinate their efforts to make the most of these export opportunities.

c) Research Work

Dr Dennis Anderson from Canberra has taken up a position as a bee pathologist at DSIR, Mt Albert. Dr Anderson's appointment is the end result of negotiations by ASD, by DSIR, and by the Executive of the NBA. The beekeeping industry will fund the second year of Dr

Anderson's programme.

A recent list of people currently doing research work or survey work on honey bees (excluding pollination) has been compiled by the apiary section. There are approximately 28 people engaged in this research.

d) Export Manuals

Two manuals called "Queen Bee Export Manual" and "Honey Export Manual" have been prepared. The Secretary of the NBA is holding copies of these manuals and is authorised to make copies for anyone who wishes to obtain them.

The manuals contain examples of all the government certificates currently in use for both honey and queen bees. The certificates have been stamped with the word "cancelled". This is a defacing mark only.

e) Pesticide Analyses

Sixty-four samples of honey bees or pollen were analysed for pesticides last year by Wallaceville or Ruakura. Many other bee kills were reported by samples were not required.

Areas of mixed horticultural plantings continue to cause the most problem: eg kiwifruit and peaches or raspberries, citrus and apples, etc. The orchard and apiary location maps maintained by the Fruit Growers' Federation in North Auckland, Auckland, and the Bay of Plenty helped reduce pesticide damage to honey bees. Our thanks go to the Fruit Growers' Federation for their efforts on our behalf.

Pesticide analyses in the future will be charged for and this charge will probably be passed on to the beekeeper.

f) Kiwifruit Pollination

The number of hives required for pollination continues to grow. A survey of pollination hives was conducted in 1,120 Bay of Plenty orchards involving over 160 beekeepers. Approximately 60% of the hives surveyed were satisfactory pollination units, with 40% marginal and 10% judged as being below standard.

American Brood Disease *Levels in Apiary Districts 1984/85 (To May 31st) (1983/84 Figures in Brackets)

Apiary District	Diseased Apiaries		Diseased Colonies		% Apiaries
	No.	%	No.	%	Inspected
Whangarei	48	0.2	107	0.5	
Auckland	63**(71)	2.3 (2.5)	152 (187)	0.8 (0.9)	
Hamilton	165 (86)	5.4 (3.3)	220 (140)	0.5 (0.3)	14.4
Tauranga	268 (110)	8.0 (4.1)	676 (283)	1.4 (0.8)	10.4
Palmerston N.	(64)	(2.0)	(152)	(0.5)	
Nelson	153 (92)	7.2 (3.4)	340 (167)	1.5 (0.8)	7.5
Christchurch	40 (30)	1.1 (0.8)	303 (150)	0.7 (0.4)	
Oamaru	88 (69)	2.6 (2.4)	188 (144)	0.4 (0.4)	8.8
Gore	129 (72)	6.2 (3.4)	296 (102)	1.0 (0.3)	8.5

^{*} Figures represent a 16 month period

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 $[\]ensuremath{^{**}}$ 1983/84 figures in brackets for Auckland represent Auckland and Northland.